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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,144	07/30/2001	Taejae Lee	STL920000097US1	3014

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EXAMINER
FLEURANTIN, JEAN B

ART UNIT	PAPER NUMBER
2172	

DATE MAILED: 01/28/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/918,144	LEE ET AL.	
	Examiner	Art Unit	
	Jean B Fleurantin	2172	

-- The MAILING DATE of this communication appears on the cover sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 November 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-57* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-57* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Amendment

1. Claims 1-57 remain pending for examination.

Response to Applicant' Remarks

2. Applicant's arguments, see pages 18-28, filed November 12, 2003, with respect to claims 1-57 have been fully considered but they are not persuasive because of the following reasons:

A. In response to applicant's arguments on pages 18-28, that "Nowhere does the cited Leymann columns and lines teach or disclose the claim requirement ....". It is respectively submitted that Leymann reference discloses the claimed invention as follow: Leymann teaches a method for maintaining workflow related information, comprising: providing at least one table in a database storing workflow related data (thus, the event generator indicates the occurrence of an event by a posted event indication to said event monitor which verifies said posted event indication by consulting said event manager and then stores said posted event indication in the posted event table and, if then said event monitor detects a matching awaiting event indication in said awaiting event table, it indicates this together with event data to the WFMS, col. 6, lines 14-21);

providing a plurality of programming interfaces, wherein each programming interfaces specifies an operation to perform on the workflow related data in the at least one table (thus, an application programming interface to allow applications to request event monitor functions, the set of functions include requests such as querying the posted table, see col. 15, lines 19-25), wherein each programming interface is associated with one stored procedure call (thus, a process

instance is started either via the graphical interface or via the callable process application programming interface, see col. 11, lines 21-23);

providing in the database one stored procedure for each stored procedure call and corresponding method, wherein the one stored procedure includes a plurality of database statements to perform the programming interface operation (thus, a process instance is started either via the graphical interface or via the callable process application programming interface, when a process is started the start activities are located, the proper people are determined and the activities are posted onto the work list of the selected people, if a user selects the activity, the activity is executed and removed from the work list of any other user to whom the activity has been posted after an activity has been executed, its exit condition is evaluated, see col. 11, lines 21-28); and

executing the one stored procedure in the database to perform the corresponding programming interface operation on workflow related data in one table (thus, a process instance is started either via the graphical interface or via the callable process application programming interface, when a process is started the start activities are located, the proper people are determined and the activities are posted onto the work list of the selected people, if a user selects the activity, the activity is executed and removed from the work list of any other user to whom the activity has been posted after an activity has been executed, see col. 11, lines 21-28).

Interpretation of Claims-Broadest Reasonable Interpretation, see MPEP 2111. During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecussion and broad interpretation by the examiner reduces the possibility that the

claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

Therefore, the rejection in last Office Action maintains.

Claim Rejections - 35 USC § 102

B. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-57 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,065,099 issued to Leymann et al., submitted by the Applicant ("hereinafter Leymann").

As per claims 1, 20 and 39, Leymann teaches a method for maintaining workflow related information, comprising: providing at least one table in a database storing workflow related data (thus, the event generator indicates the occurrence of an event by a posted event indication to said event monitor which verifies said posted event indication by consulting said event manager and then stores said posted event indication in the posted event table and, if then said event monitor detects a matching awaiting event indication in said awaiting event table, it indicates this together with event data to the WFMS, col. 6, lines 14-21);

providing a plurality of programming interfaces, wherein each programming interfaces specifies an operation to perform on the workflow related data in the at least one table (thus, an application programming interface to allow applications to request event monitor functions, the

set of functions include requests such as querying the posted table, see col. 15, lines 19-25), wherein each programming interface is associated with one stored procedure call (thus, a process instance is started either via the graphical interface or via the callable process application programming interface, see col. 11, lines 21-23);

providing in the database one stored procedure for each stored procedure call and corresponding method, wherein the one stored procedure includes a plurality of database statements to perform the programming interface operation (thus, a process instance is started either via the graphical interface or via the callable process application programming interface, when a process is started the start activities are located, the proper people are determined and the activities are posted onto the work list of the selected people, if a user selects the activity, the activity is executed and removed from the work list of any other user to whom the activity has been posted after an activity has been executed, its exit condition is evaluated, see col. 11, lines 21-28); and

executing the one stored procedure in the database to perform the corresponding programming interface operation on workflow related data in one table (thus, a process instance is started either via the graphical interface or via the callable process application programming interface, when a process is started the start activities are located, the proper people are determined and the activities are posted onto the work list of the selected people, if a user selects the activity, the activity is executed and removed from the work list of any other user to whom the activity has been posted after an activity has been executed, see col. 11, lines 21-28).

As per claims 2, 21 and 40, Leymann teaches a method, wherein one table comprises a workflow file including entries of workflow files, wherein each workflow file includes code defining an entire workflow, including nodes and workflow parameters (thus, the event generator indicates the occurrence of an event by a posted event indication to said event monitor which verifies said posted event indication by consulting said event manager and then stores said posted event indication in the posted event table and, if then said event monitor detects a matching awaiting event indication in said awaiting event table, it indicates this together with event data to the WFMS, col. 6, lines 14-21).

As per claims 3, 22 and 41, Leymann teaches a method, further comprising providing one table including information on actions associated with one workflow file in the workflow file table, wherein the associated actions are capable of being performed at the nodes defined in the associated workflow file (thus, the event generator indicates the occurrence of an event by a posted event indication to said event monitor which verifies said posted event indication by consulting said event manager and then stores said posted event indication in the posted event table and, if then said event monitor detects a matching awaiting event indication in said awaiting event table, it indicates this together with event data to the WFMS, col. 6, lines 14-26).

As per claims 4, 23 and 42, in addition to claim 1, Leymann further teaches providing a set programming interfaces for each table including workflow related data, wherein each set of programming interfaces defines a same set operations to perform on the table for which the set is provided (thus, a process instance is started either via the graphical interface or via the callable

process application programming interface, when the process is started the start activities are located the proper people are determined and the activities are posted onto the work list of the selected people, see col. 11, lines 21-23).

As per claims 5, 24 and 43, the limitations of claims 5, 24 and 43 are rejected in the analysis of claim 1, and these claims are rejected on that basis.

As per claims 6, 25 and 44, Leymann teaches the method, wherein the workflow related tables comprise: a workflow file table, wherein each entry includes one workflow file including code defining a workflow and nodes of the workflow, (col. 6, lines 14-21);

a worklist table, wherein each entry includes a worklist associated with a plurality of work items performed at the nodes defined in the associated workflow files, (see col. 6, lines 19-26); and

an action list table, wherein each entry includes a list of actions capable of being performed at the nodes defined within on workflow file in the workflow file table, (see col. 5, lines 33-42).

As per claims 7, 26 and 45, Leymann teaches, wherein the workflow related tables further comprise: an action table, wherein each entry includes one action name and an address of a program implementing the action, wherein every action listed in the entries of the action list table are defined in the action table (thus, an application programming interface to allow applications to request event monitor functions, the set of functions include requests, such as

querying the posted event table, removing entries from the posted event table, querying the awaited event table, removing entries from the awaited event table and inserting entries into the posted event table, see col. 15, lines 19-25).

As per claims 8, 17, 27, 36, 46 and 55, in addition to claims 1 and 4, Leymann further teaches a update programming interface to invoke one stored procedure to update one entry of workflow related data in the table associated with the set, (see col. 15, lines 19-22);

a delete programming interface to invoke one stored procedure to delete one entry of workflow related data in the table associated with the set (thus, the set of functions include requests, such as querying the posted event table, removing entries from the posted event table, see col. 15, lines 21-23); and

a list programming interface to invoke one stored procedure to list a description of all entries of workflow related data in the table associated with the set (thus, inserting entries into the posted event table, see col. 15, lines 24-25).

As per claims 9, 28 and 47, Leymann teaches the method, further comprising receiving workflow related data from a workflow builder program, wherein the workflow builder program calls the programming interfaces to invoke the associated stored procedure calls and the stored procedures to perform the programming interface operations on the at least one table of workflow related data, (see col. 11, lines 21-28).

As per claims 10, 29 and 48, the limitations of claims 10, 29 and 48 are rejected in the analysis of claim 2, and these claims are rejected on that basis.

As per claims 11, 30 and 49, Leymann teaches the method, further comprising executing one stored procedure to retrieve one workflow file in response to receiving a stored procedure call invoked by a programming interface from the build time program to retrieved one workflow file, wherein the build time program exports the retrieved workflow file to a workflow engine, (see cols. 15-16, lines 51-10).

As per claims 12, 31 and 50, Leymann teaches the method, wherein the workflow files are implemented in the FlowMark Definition Language (FDL), (see col. 15, lines 51-53).

As per claims 13, 32 and 51, Leymann teaches a method for maintaining workflow related information, as claimed comprises receiving column definitions for multiple columns in at least one table (thus, the input container column contains the actual values of the fields in the associated input container of the event, see col. 14, lines 22-24); and

(b) for each table for which column definitions are received, performing, performing: (i) generating a table in the database including one column for each column definition, wherein each column is generated with attributes specified by the column definition for which the column is generated (thus, column in this table represents an optional value for tupels of this table and can be used for specifying particular process instances which might consume the event instance, see col. 14, lines 36-39); and

(ii) generating at lest one stored procedure including database statements in the database to perform an operation on the data in the generated table, wherein the stored procedure is capable of accessing the columns generated according to the column definitions (thus, a process instance is started either via the graphical interface or via the callable process application programming interface, when a process is started the start activities are located, the proper people are determined and the activities are posted onto the work list of the selected people, if a user selects the activity, the activity is executed and removed from the work list of any other user to whom the activity has been posted after an activity has been executed, see col. 11, lines 21-28).

As per claims 14, 33 and 52, the limitations of claims 14, 33 and 52 are rejected in the analysis of claim 1, and these claims are rejected on that basis.

As per claims 15, 34 and 53, Leymann teaches the method, wherein the provided interfaces are members of an object oriented class, wherein one class is provided for each generated table, and wherein the programming interfaces for one class are capable of invoking stored procedures to perform database operations on the table for which the class of programming interfaces are provided (thus, a process instance is started either via the graphical interface or via the callable process application programming interface, when the process is started the start activities are located the proper people are determined and the activities are posted onto the work list of the selected people, see col. 11, lines 21-23).

As per claims 16, 35 and 54, Leymann teaches the method, further comprising providing one programming interfaces for each generated stored procedure, wherein each provided programming interface is called to invoke one stored procedures call to further invoke and execute one stored procedure in the database, (see col. 11, lines 21-28).

As per claims 18, 37 and 56, the limitations of claims 18, 37 and 56 are rejected in the analysis of claim 15, and these claims are rejected on that basis.

As per claims 19, 38 and 57, the limitations of claims 19, 38 and 57 are rejected in the analysis of claim 13, and these claims are rejected on that basis.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B Fleurantin whose telephone number is 703-308-6718. The examiner can normally be reached on 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BREENE JOHN E can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Jean Bolte Fleurantin

2004-01-22

SHAHID ALAM
PRIMARY EXAMINER